Horticulture Tips
December 2009

Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Oklahoma State University

GARDEN TIPS FOR DECEMBER!

David Hillock

Lawn & Turf

- Remove leaves from cool-season grasses or mow with a mulching mower. (HLA-6420)
- Continue mowing cool-season lawns on a regular basis. (HLA-6420)
- Continue to control broadleaf weeds in well-established warm- or cool-season lawns with a post-emergent broadleaf weed killer. (HLA-6421)

Tree & Shrubs

- Select a freshly cut Christmas tree. Make a new cut prior to placing in tree stand. Add water daily.
- Live Christmas trees are a wise investment, as they become permanent additions to the landscape after the holidays.
- Light prunings of evergreens can be used for holiday decorations. Be careful with sap that can mar surfaces.

Flowers

- Apply winter mulch to protect rose bush bud unions and other perennials. Wait until after several early freezes or you will give insects a good place to winter.
- Poinsettias must have at least six hours of bright, indirect light daily. Keep plants away from drafts.

Fruits & Nuts

- Cover strawberry plants with a mulch about 3-4 inches thick if plants are prone to winter injury.
- Wait to prune fruit trees until late February or March.

General

- Keep all plants watered during dry conditions even though some may be dormant.
- Irrigate all plantings at least 24 hours before hard-freezing weather if soil is dry. (HLA-6404)
- Order gardening supplies for next season.
- Now is a great time to design and make structural improvements in your garden and landscape.
- Send for mail-order catalogs if you are not already on their mailing lists.
- Christmas gift ideas for the gardener might include tools, garden books, magazine subscriptions, *Oklahoma Gardening* educational tapes, or membership to Oklahoma Botanical Garden & Arboretum.
- Clean and fill bird feeders.

- Make sure indoor plants are receiving enough light, or set up an indoor fluorescent plant light.
- Till garden plots without a cover crop to further expose garden pests to harsh winter conditions.
- Visit your county office to obtain gardening fact sheets for the new gardening season.
- Join a horticulture, plant, or urban forestry society and support community "greening" or "beautification" projects.
- Review your garden records so you can correct past mistakes. Purchase a new gardening journal or calendar to keep the New Year's gardening records.

GARDEN TIPS FOR JANUARY!

David Hillock

- If precipitation has been deficient (1" of snow = ~ 1/10" of water), water lawns, trees, and shrubs, especially broadleaf and narrowleaf evergreens. Double check moisture in protected or raised planters.
- Check on supplies of pesticides. Secure a copy of current recommendations and post them in a convenient place. Dilution and quantity tables are also useful.
- If you did not treat young pines for tip borers in November, do so before March.
- Check that gardening tools and equipment are in good repair—sharpen, paint, and repair mowers, edgers, sprayers and dusters.
- Inspect your irrigation system and replace worn or broken parts.
- Control overwintering insects on deciduous trees or shrubs with dormant oil sprays applied when the temperature is above 40°F in late fall and winter. Do not use "dormant" oils on evergreens. (EPP-7306)
- A product containing glyphosate plus a postemergent broadleaf herbicide can be used on dormant bermudagrass in January or February when temperatures are above 50°F for winter weed control. (HLA-6421)

Houseplants in Winter

David Hillock

During the winter months our attention often turns to plants growing indoors. Like most plants outdoors, many plants indoors also go into a rest stage. This rest stage usually shows up as reduced growth and in some cases the loss of some leaves. This rest stage is a result of the shorter days and reduced light levels inside the home.

During this period plants won't need too much water and little to no fertilizer. When a plant seems to be struggling most people have a tendency to add more water or fertilizer, but this could lead to further problems. Unless your plants are growing under near greenhouse conditions, water only when the top ½ inch of potting soil is dry and avoid adding fertilizer.

Another problem that arises during the winter months is exposure to cold drafts or the dry, blasting air from the heater. Humidity can also be lower. To avoid these problems locate plants away from doorways or the heater registers. Plants grow best at temperatures between 65°F to 75°F and a humidity of 50 to 60 percent. Temperatures are usually easier to control, but controlling humidity is more challenging. Humidity levels of 50 to 60 percent are higher than what most people like. Control humidity with a humidifier or by setting pots on a tray of moist gravel or pebbles. Do not allow the water to touch the bottom of the pot, as water would then be wicked into the potting medium and keep the plant too wet. A transparent polyethylene bag can be draped over plants that are extremely humidity sensitive or are in poor condition.

This is also a good time to see if plants are root-bound too. If they are root bound, plant them in a pot that is only 1 to 2 inches larger in diameter than the pot in which the plant is currently growing.

Pecan Graftwood Collection

Eric T. Stafne

Have you ever found a native tree that produced great, flavorful nuts every year and thought how to make more of them? Do you have a lot of native pecan trees that produce few or poor nuts and wished you could switch them to another variety? Well, all of that is possible and we are at a good time of year to collect that graftwood. December is usually a time before the harshest cold gets to Oklahoma, but the trees are dormant. That combination makes for a good collection period.

Collecting Graftwood – Graftwood can be collected in December through February or early March while the tree is still dormant before the buds start to swell. One-year old, vigorous, healthy wood from the desired variety must be collected in order to have success the following grafting season (April and May). Select your target tree and make sure that the variety is known and that the trees are free of disease. Larger diameter wood, (> 3/8-inch diameter), is generally too large for grafting, whereas medium-size graftwood (1/4-to 1/2-inch diameter) is best for grafting. The best graftwood is found on young, vigorous trees and in the tops of mature trees. Heavily pruned trees will force vigorous new growth for use as graftwood. Be sure to label all graftwood as it is cut from the parent tree to avoid errors in identification. It is extremely important that the graftwood not dry out before it is placed in storage. A moist burlap sack or plastic bag with moist newspaper wrapped around the graftwood will suffice.

Preparation for Storage – Graftwood should be handled carefully to prevent damage to the buds. The terminal end of the one-year-old wood should be removed. The best graftwood is usually taken from the center portion or basal two-thirds of each shoot and cut into 6-, 12-, or 18-inch lengths. Each six-inch length will make a stick of graftwood long enough to be successful. Tie the propagation wood into bundles and make sure that each bundle is clearly labeled. Identification mistakes on pecan varieties can lead to long term frustration. The easiest

way to label a piece or bundle of graftwood is to make a slash cut on the lower end of a bud or graft stick and listing the variety name on the cut with a lead pencil.

Storing Graftwood – Graftwood must be kept alive and healthy during storage. It may be packed in moist media, such as sphagnum moss, sawdust, newspaper or wood shavings. Various containers can be used as storage containers, such as wooden boxes, crates, metal cans with tight fitting lids or polyethylene bags. Graftwood can also be stored in a durable polyethylene bag (quart size or larger) without packing in moist media if the bag has an airtight seal. Graftwood should be kept where the temperature is 30°F to 35°F. A household refrigerator works as long as the wood is not allowed to freeze.

Using Graftwood – When propagation season arrives (April-May), graftwood for bark grafting and splice grafting should be taken directly from storage and used immediately. The sooner it is used after removal from storage, the better. Graftwood should never be allowed to dry out from the time it is cut from the tree until it is used. Dry wood is one of the primary causes of propagation failure.

Remember, the bark must be slipping (easily cut and peeled back) from the rootstock tree before grafting can be done. Successful pecan grafting is dependent on proper collection and storage of graftwood. Always keep in mind that graftwood must be collected during the dormant season and stored properly until the spring grafting period.

Tree Selection for Ice Tolerance

Kim Rebek

Ice storms are a common winter phenomenon in Oklahoma and many of our landscape trees suffer severely from ice damage each year. Strong winds and heavy ice loads snap branches, bend trunks, and can cause extensive property damage. The best defense against winter storm damage to trees is proper species selection. Following the ice storms of the past two winters, several tree species have shown fairly good tolerance to heavy ice loads. Among the top performers are several Oklahoma Proven selections including Bald Cypress (*Taxodium distichum*), Chinese Pistache (*Pistacia chinensis*), Bur Oak (*Quercus macrocarpa*) and Kentucky Coffee Tree (*Gymnocladus dioica*).

Other trees demonstrating good performance through ice storms have been the Black Walnut (*Juglans nigra*), Ginkgo (*Ginkgo biloba*) and Catalpa (*Catalpa* species). The very popular Ornamental Sweetgum (*Liquidambar styraciflua*) has shown mixed results, suffering damage in some locations while performing well in other areas.

Tree health going into the storm will play a large part in how well any tree can tolerate damage. Even those species exhibiting good ice tolerance will succumb to damage if the tree is in poor health. Entering the winter with a healthy, well branched tree is a good start in avoiding ice damage. OSU fact sheet EPP-7323 Managing Storm-Damaged Trees addresses ways to maintain

the health of trees so as to minimize storm damage. When purchasing new trees, look for specimens with broadly angled branches that are well spaced along and around the trunk. Early, regular pruning will also help establish a strong tree. For more information on tree pruning refer to OSU fact sheet HLA-6409 Pruning Ornamental Trees, Shrubs, and Vines.

Proper Plant Placement Saves Time and Money

Kim Rebek

Winter is a great time to design new garden plantings. As we look for plants to use in our landscape, the most important consideration in plant selection is to match the plant to the planting site. This begins with conducting a site survey of a landscape to collect information on sun and wind exposure, soil type and nutrition, and soil moisture. All of these factors will influence the types of plants that will perform best on a site.

Choosing plants that are adapted to the existing conditions will save time and money. Plants placed in a location that meets their needs usually thrive without a great deal of extra attention, while a poorly placed plant is more likely to be stressed and more vulnerable to pest problems. Poorly sited plants are also more likely to require replacement.

All plants have specific cultural needs, including the amount of sunlight required, moisture needs, drainage requirements, and optimal soil pH. While some of these site characteristics can be altered, it is best, and certainly easiest to work with the existing conditions, as they are likely to recur over time. For example, a tree canopy can be thinned to allow greater light penetration, however, the trees will re-grow and thinning will be required periodically over time. Another condition that is best worked with rather than altered whenever possible is soil pH. If you choose to alter soil pH it is best done during bed preparation, but will likely require follow-up treatments. On the other hand, variation in pH can provide opportunity to plant a larger assemblage of plant types.

Two additional important characteristic to consider are the USDA Hardiness Zone and AHS Plant Heat Zone in which you live. The USDA Hardiness zone map is used to identify the average annual minimum temperature for your area. Plants are rated based on the lowest temperatures in which they can survive the winter. Oklahoma falls within Hardiness zones 6 and 7. Be sure to check a map on-line to more accurately identify your hardiness zone (http://www.usna.usda.gov/Hardzone/ushzmap.html).

Many plants have also been coded for their heat tolerance, which can be very important here in Oklahoma. The American Horticulture Society Heat Zone map can be used to identify the heat zone in which you live. Most of Oklahoma falls in zone 8, with an average of 90 to 120 days above 85°F each summer (http://www.ahs.org/pdfs/05_heat_map.pdf).

Information regarding a plant's cultural requirements, including hardiness and heat tolerance can be found in a number of sources including plant labels, catalogues and our resource books. Refer

to these resources when selecting plants for the landscape. Other considerations when selecting plants include: pest resistance, drought tolerance, maintenance requirements, and invasiveness.

Mistletoe

David Hillock

Mistletoe is a familiar plant this time of year. The mistletoe that we use for decorations (*Phoradendron* spp.) is native to North America and Oklahoma. The mistletoe of European folklore is actually in the same family but a different genus (*Viscum album*) than the North American mistletoe. The customs associated with European mistletoe were transferred to the North American mistletoe with the settlers.

Mistletoe is a partial parasite. It can make its own food through photosynthesis, but it also sends roots down into the vascular tissue of the host tree to obtain water and nutrients. Mistletoe is spread by birds. They eat the seeds, which are then deposited on branches in the bird droppings. The seeds then sprout and send rootlets down during the winter; large populations of mistletoe can severely stunt the growth of the tree and even kill it over time. If mistletoe is a problem, there is a product that can help get rid of it. Florel Brand Fruit Eliminator by Monterey Lawn and Garden Products helps suppress mistletoe and can be sprayed on the mistletoe any time after the leaves have fallen from the host trees through midwinter. This product can also be used in the spring to eliminate nuisance fruit such as sweetgum balls, unwanted apples, crabapples, cottonwood, flowering pear, and other plants.

Debunking Horticultural Myths

David Hillock

Tree Wound Dressings – For many, many years, people have applied many different materials to tree wounds, hoping to protect the exposed wood and try to promote rapid closure. However, several studies have been conducted over the years and results indicate that current wound dressings are not beneficial. In 1970, a trial was conducted using five common wound dressings, including asphalt, latex paint, petrolatum and shellac. The conclusion: "no wound dressing increased the rate of healing". In fact, petrolatum dramatically reduced the rate of healing (closure).

In another trial, currently recommended wound treatments: asphalt paint, orange shellac, white latex paint, linseed oil plus copper and an untreated control were used. Eucalyptus and cottonwood trees received a single diamond-shaped wound; the various dressings were applied immediately thereafter. Wound closure was monitored for one year. The results were no significantly affected rates of wound closure in either eucalyptus or cottonwood with any treatment. This trial information supports previous studies that wound dressings do not affect wound closure rates.

Other studies have also concluded that wound dressings do not prevent infections by decaying fungi. In fact, some, such as asphalt, may actually promote wound decay. It appears that most of these treatments have no value except for purely aesthetic purposes.

Tree Stump Removers – Several "chemical stump removers" are on the market and claim to "make them rot quicker". Some of the more common chemicals offered for sale are potassium nitrate or saltpeter, sulfuric acid, and nitric acid. However, several scientific studies have been conducted over the years and they have found that no chemicals could quickly accelerate the process and are basically ineffective. One such study looked at the effects of stump decomposition by three commercially available products (1). All label directions were followed, which included drilling one inch diameter holes into the top of eucalyptus stumps, packing the holes with product and applying hot water into the holes. Untreated control stumps received holes and water only. Label directions indicated that the product treatments should be allowed to stand from 4 to 6 weeks, in this study they waited eight weeks and reevaluated the trial. Since any decomposition would reduce wood density, samples of the stumps were taken one inch away from the treated holes and weighed. No significant differences in decomposition were observed among any of the treatments. No decay was seen.

The most effective methods for stump removal include grinding, grubbing (digging out by hand), and removal and replacement with a tree spade if the stump is relatively small. Otherwise, natural rotting works just fine, but will likely take many months if not even years for complete decomposition.

1. Hickman and Perry, 1994. Hortechnology 4 (4).

Upcoming Horticulture Events

Horticulture Industries Show
January 8 and 9, 2010, Tulsa Community College, Tulsa

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or stephanie.larimer@okstate.edu.

Horticulture Tips – 2009 Index

Mistletoe, 12/09
New Shrub Fact Sheet, 03/09
Oklahoma Proven Sections for 2009, 02/09
Okra Transplanting Trail, 03/09
Pecan Graftwood Collection, 12/09
Pecan Graftwood Sources for 2009, 02/09
Pecan Nut Casebearer is Coming, 05/09
Perennial Plant of the Year for 2009, 02/09
Planning Points for Landscape Design, 05/09
Plant a Row for the Hungry, 04/09
Plant Disease and Insect Diagnostics Lab (PDIDL), 10/09
Planting Garlic, 10/09
Planting Leeks, 03/09
Planting Seed Potatoes, 02/09
Post-Harvest Irrigation of Small Fruit Crops, 07/09
Proper Plant Placement Saves Time and Money, 12/09
Pruning Blackberries for Optimum Fruiting Potential, 02/09
Pruning Equipment, 02/09
Pruning Hedges, 09/09
Pruning Roses, 03/09
Pruning Spring-Flowering Trees, Shrubs and Vines, 04/09
Resistance, Our First Defense to Pests, 04/09
Seedless Watermelon – A Fruit "Mule", 06/09
So You Have to do a Science Fair Project…, 02/09
Soil and Water pH for Fruit Crops, 06/09
Souvenirs You Shouldn't Bring Back from Vacation, 05/09
Souvenirs You Shouldn't Bring Back from Vacation – Correction, 06/09
Spring Lawn Aerification, 04/09
State Fair Horticulture Contest Results for 2009, 10/09
Ten Frequently Asked Turfgrass Questions in April, 04/09
Time to Cut Back Perennials, 03/09
Tips for Growing Vegetables on Plastic Mulch, 06/09
Tree Selection for Ice Tolerance, 12/09
Trees Add Value to a Landscape, 09/09
Turf and Landscape Fertilizer Application Tips, 06/09
Turf Scalping, Water Use and Weeds, 03/09
Turfgrass Management, Drought and White Grubs, 08/09
Turfgrass Management Tips for Summer Drought Stress Conditions, 07/09
Twig Litter, 10/09
Upgrading Irrigation to an Efficient Drip System, 06/09
Vegetables and Adverse Environmental Conditions, 05/09
When Should I Cut Back My Perennials and Ornamental Grasses?, 11/09
Wrapping Young Trees for Protection, 11/09